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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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John M. Swant

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EXAMINER

PHAM, TUAN

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/634,977	Applicant(s) SWANT, JOHN M.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 07/21/2008, with respect to the rejection(s) of claim(s) 1-14 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Genell et al. (US Patent No.: 6,122,505).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically a software application. Computer programs claimed as computer code per se, i.e., the descriptions or expressions of the programs, are not physical "things", nor are they statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention, which permit the computer program's functionality to be realized. In contrast, a claimed computer readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus statutory. See MPEP §2106 Section IV.B.I(a). The language of the claim raises a question as to whether the claim is directed merely to an abstract idea

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that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim 9, claimed **“in computer readable medium, a receiver testing application support field testing of base station receivers in a mobile communication network”** is not comply with 35 U.S.C 101. It is clearly seen that the claim language claimed the application or programs is not tangibly embodied in a physical medium and encoded on a computer- readable medium. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, claims 9-13 has not complied with 35 U.S.C 101.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendment to claim 1 on 12/22/2008 has a newly added subject matter of **“determining receiver performance by comparing the receiver**

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output to the predetermined message” is considered new matter because the specification as original filed does not provide support for such limitation.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4 and 6-14 are rejected under 35 U.S.C.103(a) as being unpatentable over Genell et al. (US Patent No.: 6,122,505, hereinafter, “Genell”) in view of Kiukkonen et al. (US Pub. No.: 2004/0203466, hereinafter, “Kiukkonen”).**

Regarding claims 1, 9, and 14, Genell teaches a method of testing performance of a receiver (see figures 1-3), the method comprising:

establishing a communication link between a transmitter and a receiver (see figure 1, communication link between transmitter in MSC 14 and receiver section 32 in base station 20, col.6, ln.25-52);

transmitting from the transmitter a signal bearing a predetermined message (see figures 1-3, MSC transmit test command to base station for testing receiver section 32, col.6, ln.25-52);

receiving the predetermined message at an antenna coupled to a receiver (see figures 1-3, col.6, ln.25-52);

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measuring the power of the signal received by the antenna at a point between the receiver and the antenna (see figures 1-3, measure the RSSI, col.6, ln.25-52);

calculating a bit-error rate of the receiver output to the predetermined message (see col.6, ln.25-52, calculate the BER based on test command receiving from MSC);

determining receiver performance by comparing the receiver output to the predetermined message (see col.6, ln.25-52, it is clearly seen that the test receiver performance is based on the test command); and

determining receiver performance by evaluating the bit-error rate, and the received message power (see figures 1-3, col.6, ln.25-52, test receiver performance based on the measurement of RSSI and BER).

It should be noticed that Genell fails to teach calculating a bit-error rate by comparing the condition of the receiver and determining receiver performance by evaluating the predetermined attenuation. However, Kiukkonen teaches calculating a bit-error rate by comparing the condition of the receiver and determining receiver performance by evaluating the predetermined attenuation (see [0024, 0026, 0034-0035], the test signal transmit at predetermine attenuation at 0.1 dB).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kiukkonen into view of Genell in order to improve operability of the base station at suggested by Kiukkonen at [0013].

Regarding claim 2, Kiukkonen further teaches receiver is deployed in a communication network (see [0036] GSM system).

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Regarding claim 3, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 4, Genell further teaches at least one selected from the group of a voice channel, a data channel, and a control channel (see col.4, ln.1-5).

Regarding claim 6, Genell teaches in a mobile communication network (see figures 1-3), comprising:

a radio base station receiver test system (see figure 1, MSC 14) that transmits a predetermined message (test commands) to a base station receiver (see figure 1, base station 20), that measures received power at the antenna (see figures 1-3, measure the RSSI, col.6, ln.25-52), that calculates the bit-error rate of the predetermined message received by the radio base station receiver (see col.6, ln.25-52, calculate the BER based on test command receiving from MSC), and determines receiver performance quality as a function of the bit-error rate and measured power (see figures 1-3, col.6, ln.25-52, test receiver performance based on the measurement of RSSI and BER).

It should be noticed that Genell teach predetermined message to a receiver at a predetermined attenuation and determining receiver performance by evaluating the predetermined attenuation. Kiukkonen teaches predetermined message to a receiver at a predetermined attenuation and determining receiver performance by evaluating the predetermined attenuation (see [0024, 0026, 0034-0035], the test signal transmit at predetermine attenuation at 0.1 dB).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kiukkonen into view of

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Genell in order to improve operability of the base station at suggested by Kiukkonen at [0013].

Regarding claim 7, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 8, Kiukkonen further teaches GSM communication network (see [0036] GSM system).

Regarding claim 10, Kiukkonen further teaches the communication routine requests the measured power before the received message enters the receiver (see [0033]).

Regarding claim 11, Kiukkonen further teaches the control routine increases the transmission attenuation level in response to the signal bearing the predetermined message (see [0035-0036]).

Regarding claim 12, Kiukkonen further teaches the communication routine requests the measured power from a power measurement device (see [0026]).

Regarding claim 13, Genell further teaches the evaluation routine medium resides in a MSC test unit (see col.4, ln.12-15, it is clearly seen that the evaluation routine medium resides in a MSC test unit for route the test commands).

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6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Genell et al. (US Patent No.: 6,122,505, hereinafter, "Genell") in view of Kiukkonen et al. (US Pub. No.: 2004/0203466, hereinafter, "Kiukkonen") as applied to claim 1 above, and further in view of Kikuchi (US Patent. No.: 4,709,403, hereinafter, "Kikuchi").

Regarding claim 5, Genell and Kiukkonen, in combination, fails to teach increasing the magnitude of the predetermined attenuation until the communication link is dropped. However, Kikuchi teaches increasing the magnitude of the predetermined attenuation until the communication link is dropped (see col.4, ln.44-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kikuchi into view of Genell and Kiukkonen in order to improve the transmission.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/TUAN A PHAM/

Primary Examiner, Art Unit 2618